

**A NATIONAL STUDY OF THE PROFESSION OF
MASSAGE THERAPY/BODYWORK**

Conducted for the

COUNCIL OF NATIONAL CERTIFICATION PROGRAM FOR MASSAGE THERAPISTS

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I. INTRODUCTION

In 1988, the American Massage Therapy Association (AMTA) officially authorized the National Certification Program for Massage Therapists. National certification is an integral part of the AMTA Strategic Plan for Professional Development in the 1990's.

It was initiated as an effort to establish a valid national credential which would enhance professional respect and consumer confidence in massage therapy. Voluntary professional certification will also provide a self-regulatory device and a method of self-definition for massage therapists. It can serve as an internally generated standard for use by external regulators (e.g., state licensing agencies), which would help preserve the autonomy of the profession.

The Guidelines of the National Commission for Certifying Agencies (NCCA) were adopted for development of the Program. This was to ensure that the National Certification Program for Massage Therapists meet the highest recognized standards for professional certification programs. These Guidelines dictate that the Program be administratively independent from the AMTA, and that the process meet standards of fairness, accessibility and validity among others. To help ensure this aim the National Certification Steering Committee was appointed (see Appendix A).

One of the most important NCCA guidelines involves the validity of the certification examination, i.e., that the examination reflect the reality of which skills, knowledges and abilities are actually needed to perform the work. A more basic consideration is whether there is even a core body of knowledge and skills common to practitioners which can be tested. If there were significant disagreement among practitioners about what constituted entry level skills and knowledges, a national certification program would not be justified.

Most occupational and professional licensing and certification agencies use content validation as the basis for documenting the appropriateness of their testing and assessment procedures. Both legal guidelines and the accepted standards for educational and psychological testing stipulate that the content validity of a licensing or certification examination must be established by means of a job analysis. The job analysis provides detailed information about the tasks job incumbents

perform on the job and the knowledge and skills necessary for competent performance.

The information derived from the job analysis is used to develop a "blueprint" or set of test specifications which defines the content of the examination. The content is linked to the tasks the practitioner must perform, thereby ensuring that the assessment procedures will require that knowledge be used as it is in the actual work setting. These procedures demonstrate and document the job-relatedness of the examination.

The job analysis of the profession of Massage Therapy/Bodywork that is the subject of this report was conducted by Knapp and Associates, Princeton, New Jersey, at the request of the National Certification Steering Committee. The procedures used by Knapp and Associates involved an interactive process that combined 1) the job analysis expertise of Knapp and Associates staff members; 2) the professional knowledge of an expert Advisory Committee made up of prominent members of the profession; and 3) the judgments of a large nationwide sample of practitioners in the field of Massage Therapy/Bodywork.

II. METHOD

The job analysis consisted of a number of steps that included a national survey of Massage Therapy/Bodywork practitioners conducted in August and September of 1990. The job analysis survey instrument was an inventory of the professional responsibilities of massage therapists/bodyworkers and of the knowledge and skills needed to carry out those responsibilities. The development of the survey instrument relied heavily on the professional judgment of the Advisory Committee, which was comprised of practicing Massage Therapy/Bodywork professionals and educators. The steps followed by Knapp and Associates in developing, administering, and analyzing the job analysis study will be described in sequence below.

A. Establishment of an Advisory Committee

The first step in the process was to establish a 12 member Advisory Committee for the project. The Job Analysis Advisory Committee was a subcommittee under the National Certification Steering Committee and was made up of the Steering Committee and three additional members. The members of the Committee were experienced Massage Therapy/Bodywork professionals selected to represent various regions of the country, practice disciplines, professional affiliations, regulatory agencies, ethnic back-grounds and a diversity of practice settings, educational, and experiential backgrounds. Appendix B contains a list of the Advisory Committee.

The role of this Advisory Committee was to assist in the development of the job analysis survey instrument to ensure that the full range of professional responsibilities and knowledge areas was comprehensively and accurately represented. Representation of different Massage Therapy/ Bodywork disciplines was important to this process, in order to ensure that key responsibilities and knowledge areas across a variety of practice settings would be included. In addition, the Advisory Committee reviewed drafts and final versions of the survey instrument and reviewed and approved this final report.

B. Literature Review

The National Certification Steering Committee and Advisory Committee supplied Knapp and Associates staff with documents that provided an overview of the field of Massage Therapy/Bodywork and the training, experience, and knowledge necessary for competent performance in a variety of settings. The literature included job descriptions, training manuals and

workbooks, state and local licensing regulations, textbooks, articles, school curricula and lecture materials, memoranda and reports. Appendix C contains a listing of the literature and reference materials. After reviewing this material, Knapp and Associates staff members were able to identify and prepare draft listings of the important professional responsibilities and the knowledge and skills essential to competent performance on the job.

C. Interviews with Practicing Professionals

After the literature review and an initial compilation of the draft listings of responsibilities and knowledge areas, Knapp and Associates staff conducted interviews with several experienced, practicing massage therapists/bodyworkers to review and revise the listings and to identify additional responsibilities and knowledge areas as a preliminary check on the first draft of the lists. The National Certification Steering Committee provided contacts with persons practicing in various environments. The names of the individuals who generously contributed their time and expertise in these interviews are listed in Appendix D. The discussions focused on identifying, reorganizing, and editing the lists of responsibilities and knowledge areas to ensure their comprehensiveness and accuracy, in preparation for their formal review by the Advisory Committee.

D. Development of a Draft Inventory

Based on review of the literature and discussion of the draft listings in interviews with practicing professionals, Knapp and Associates staff formatted the listings of responsibilities and knowledge areas into a draft survey instrument. The first section listed a series of tasks or professional responsibilities that constitute the important aspects of the job. The second section contained a listing of the important professional knowledge areas that practitioners must have assimilated in order to carry out their professional functions. The third section of the questionnaire contained a number of demographic questions that would help to describe the sample and identify categories for use in data analysis.

The draft inventory was presented to the Advisory Committee for formal review and revision during a two-day meeting convened in Baltimore, Maryland, in May 1990. The major topic areas within each section were rearranged and modified and the specific statements

within them were discussed, revised, and edited for accuracy, clarity, and comprehensiveness.

E. Revision of the Draft Inventory

Following the Advisory Committee meeting, a revised job analysis inventory was prepared incorporating the Committee's recommendations. The revised draft was sent to the 12 Advisory Committee members for an additional review and approval. Each Committee member was interviewed by Knapp and Associates staff to ensure the comprehensiveness and accuracy of the survey instrument as well as inclusion of the most important tasks and knowledge areas.

F. Pretest of the Draft Inventory

The revised inventory was next sent to 15 additional massage therapists/bodyworkers selected by Knapp and Associates from a list of 50, for a pretest prior to administration of the full survey. These 15 massage therapists/bodyworkers who were not part of the Advisory Committee or the National Certification Steering Committee (see Appendix D), represented a diversity of practice settings and geographic regions of the country. Thirteen out of the 15 were interviewed and served as a check for any possible remaining problems with instructions or procedures for filling out the survey instrument.

G. Final Version of the Job Analysis Survey Instrument

After final revisions, which incorporated pretest interviewees' comments and Advisory Committee approval, the job analysis survey instrument was printed in quantity by the National Certification Steering Committee in preparation for the survey administration. The final version of the instrument is presented in Appendix E of this report. It includes a section dealing with professional responsibilities, a second section dealing with the knowledge necessary to carry out those responsibilities, a request for suggested allocation of examination content, and a final section containing several demographic questions to help characterize the sample of persons responding to the survey.

Part I: Professional responsibilities. The instrument lists 73 professional responsibilities in Part I, organized into seven broad categories (job dimensions):

1. Session/Treatment Techniques
2. Assessment
3. Session Plan/Treatment Strategy
4. Client/Patient Preparation
5. Client/Patient Management
6. Session/Treatment Environment
7. Professional Development/Ethics

For each of the 73 professional responsibilities, respondents were asked to answer the following question:

IMPORTANCE: Regardless of the amount of time spent, how important is competence in this activity for an entry-level Massage Therapist/Bodyworker?

- (0) Not performed by an entry-level practitioner
- (1) Of little importance
- (2) Moderately important
- (3) Very important
- (4) Extremely important

Part II: Knowledge areas. In Part II of the job analysis inventory, 91 knowledge areas were organized into the following ten broad categories:

1. Human Anatomy and Physiology
2. Kinesiology
3. Oriental/Energetic Anatomy and Physiology
4. Clinical Pathology
5. Assessment Procedures
6. Massage/Bodywork Theory and Practice
7. Energetic, Structural and Functional Bodywork Theory and Practice

8. Recognition of Various Conditions
9. Adjunct Techniques and Methods
10. Business Practices and Professionalism

For each of the 91 knowledge areas, respondents were asked to answer the following question:

IMPORTANCE: How important is an understanding of this knowledge area for the entry-level Massage Therapist/Bodyworker to adequately serve and protect clients?

- (0) Of no importance
- (1) Of little importance
- (2) Moderately important
- (3) Very important
- (4) Extremely important

H. Selection of the Survey Sample

The national population of massage therapists/bodyworkers who are members of the American Massage Therapy Association (AMTA) at the time of the survey numbered approximately 11,000. From this total population a random spaced sample of approximately 30 percent was drawn by taking every third name until a total of 3,630 was reached. Since there are many practicing massage therapists/bodyworkers who are not AMTA members and who are either associated with other professional organizations or unaffiliated, an extensive effort was made to reach these individuals.

To accomplish this, the National Certification Steering Committee appointed Raymond Castellino, D.C., to serve as the Liaison Coordinator for this project. Dr. Castellino contacted over 100 Massage Therapy/Bodywork Disciplines, Membership Organizations and educators to invite their participation in this study (see Appendix F). As a result of this effort, sample lists with the names of additional non-AMTA massage therapists/bodyworkers ($N=$ approximately 9,500) were submitted. Similarly, a sample of 30 percent was drawn from this population resulting in 3,300 non-AMTA members. With this relatively large sample, we can be confident that the various regions of the country, ethnic groups, practice disciplines and settings were represented in proportion to their occurrence in the population.

I. Administration of the Survey

The final version of the survey instrument was mailed to the sample of 6,930 massage therapists/bodyworkers in August, 1990, along with a postage-paid return envelope and a letter from George Kousaleos, Chairperson, National Certification Steering Committee and Susanne Carlson, Chairperson, Job Analysis/Test Construction Committee, requesting their support and participation. A copy of the letter is included in Appendix G.

Approximately ten days after the initial mailing, a follow-up postcard was sent to each of the 6,930 individuals as a reminder and as a way of increasing total response rate. The postcard is shown in Appendix H.

III. RESULTS

A. Return Rate

Of the total 6,930 survey instruments mailed, 2,859 persons (41 percent of the sample) responded by mailing back a completed questionnaire. Based on experience with similar surveys in the past, a 41 percent return can be considered an excellent response rate, and indicates a strong commitment to advancement of the profession among Massage Therapy/Bodywork professionals. Usable questionnaires ($N = 2,574$) were retained from 37% of the sample by the stated survey return date.

B. Demographic Characteristics of Respondents

In this section of the report, we present results of analyses of the responses to the demographic questions in the survey. These data serve as a description of the group that completed and returned the survey.

Gender. The respondent group were predominately women, as shown in the table below.

Gender	Number	Percent
Men	681	26.5
Women	1,853	72.0
No Response	40	1.5
Total	2,574	100

Ethnic background. Slightly over 90 percent of respondents described themselves as being White and non-Hispanic. The complete distribution of ethnic group membership in the respondent group was as follows:

Ethnic Background	Number	Percent
American Indian/Alaskan Native	10	.4
Asian or Pacific Islander	31	1.2
Black	32	1.2
Hispanic	40	1.6
White (non-Hispanic)	2,360	91.7
Other	44	1.7
No Response	57	2.2
Total	2,574	100

Age. The majority of the respondents were between the ages of 35-44 and nearly 90 percent were between 25-54.

Age	Number	Percent
Under 25	45	1.7
25 - 34	562	21.8
35 - 44	1,147	44.6
45 - 54	542	21.1
55 - 64	180	7.0
65 or over	65	2.5
No Response	33	1.3
Total	2,574	100

Geographic region of practice. The distribution of respondents across the major geographic regions of the United States is shown in the table below. Each of the five major regions of the country was represented by a substantial number of respondents.

Geographic Region	Number	Percent
Pacific	645	25.1
Midwest	326	12.7
Great Lakes	500	19.4
Southeast	459	17.8
Northeast	598	23.2
Other	28	.9
No Response	18	.8
Total	2,574	100

Current level of education. Most respondents reported having had some college education with approximately 50 percent reporting 4 years of college or more.

Educational Level	Number	Percent
Did not complete High School	18	.7
High School or Equivalent	169	6.6
Some College	463	18.0
Technical/Vocational Certificate	355	13.8
2-Year College	287	11.1
4-Year College	823	32.0
Master's Degree	348	13.5
Advanced Degree	92	3.6
No Response	19	.7
Total	2,574	100

Location of practice. Nearly 90 percent of the respondents practice in either suburban or urban locations.

Location of Practice	Number	Percent
Urban	1,191	46.3
Suburban	1,043	40.5
Rural	302	11.7
No Response	38	1.5
Total	2,574	100

Number of years practicing Massage Therapy/Bodywork.

Slightly over 30 percent of the respondents reported practicing in the field of Massage Therapy/Bodywork for 3-5 years with nearly three-fourths of the respondents reporting 1-10 years experience.

Years Practicing	Number	Percent
Less than 1 Year	214	8.3
1 - 2 Years	529	20.6
3 - 5 Years	790	30.7
6 - 10 Years	589	22.9
11 - 15 Years	279	10.8
16 - 20 Years	98	3.8
21 or more Years	63	2.4
No Response	12	.5
Total	2,574	100

Type of Initial Massage Therapy/Bodywork training. The majority of the respondents reported their initial Massage Therapy/Bodywork training was primarily from a school training program.

Type of Training	Number	Percent
Self-Taught	216	8.4
Workshops, Seminars	376	14.6
School Training Program	1,813	70.4
Apprenticeship	156	6.1
No Response	13	.5
Total	2,574	100

Hours of Massage Therapy/Bodywork training. Approximately two-thirds of the respondents reported having over 500 hours of Massage Therapy/Bodywork training.

Hours of Training	Number	Percent
Less than 100 Hours	61	2.4
101 - 200 Hours	153	5.9
201 - 300 Hours	191	7.4
301 - 500 Hours	417	16.2
501 - 1,000 Hours	946	36.8
More than 1,000 Hours	768	29.8
No Response	38	1.5
Total	2,574	100

Type of Massage Therapy/Bodywork continuing education.

Nearly 70 percent of the respondents reported workshops and seminars to be their primary means of continuing education.

Type of Continuing Education	Number	Percent
Self-Taught	252	9.8
Workshops, Seminars	1,743	67.7
School Training Program	472	18.3
Apprenticeship	87	3.4
No Response	20	.8
Total	2,574	100

Practice setting. The distribution of settings in which respondents reported practicing is shown below. Private practice in the home or in a clinic or office account for slightly over 65 percent of the reported settings.

Practice Settings	Number	Percent
Private Practice Clinic/Office	853	33.1
Private Practice in Home	856	33.3
Hospital/Nursing Home	22	.9
Fitness Center/Health Club/Spa	227	8.8
Sports Medicine Facility	12	.5
Wholistic Health Center	73	2.8
Resort/Hotel/Cruise Ship	42	1.6
Beauty/Skin Care Salon	84	3.3
Corporation/On-Site	13	.5
In Another Health Professional Office	190	7.4
Other	174	6.8
No Response	28	1.0
Total	2,574	100

Organizational membership. Nearly 60 percent of the respondents reported American Massage Therapy Association membership and nearly 20 percent reported belonging to two Massage Therapy/Bodywork organizations or more.

Organization	Number	Percent
American Massage Therapy Assoc.	1,493	58.0
American Oriental Bodywork Therapy	69	2.7
American Polarity Therapy	45	1.7
International Myomassethics Fed.	97	3.8
Rolf Institute	85	3.3
Associated Prof. Massage Therapists	30	1.2
Other	107	4.2
None	128	5.0
Two Organizations	429	16.7
Three or More Organizations	54	2.1
No Response	37	1.4
Total	2,574	100

Licensed to practice Massage Therapy/Bodywork. Slightly under one-half of the respondents reported that they were licensed by a state to practice Massage Therapy/Bodywork with slightly more than one-half reporting no state license to practice.

State Licensed	Number	Percent
Yes	1,054	40.9
No	1,474	57.3
No Response	46	1.8
Total	2,574	100

The majority of the respondents reported that they were not licensed by a county or municipality to practice Massage Therapy/Bodywork as seen in the table below.

County or Municipality Licensed	Number	Percent
Yes	754	29.3
No	1,743	67.7
No Response	77	3.0
Total	2,574	100

Employment status. Slightly under 90 percent of the respondents reported being self-employed.

Self-Employed	Number	Percent
Yes	2,268	88.1
No	277	10.8
No Response	29	1.1
Total	2,574	100

Session/treatment goals. The respondents were asked to indicate how important different session/treatment goals were to their professional practice. The scale of importance ranged from "0" (of no importance) through "4" (extremely important). The number responding to the goal statements varied from 2,503 to 2,550.

The session/treatment goals judged most important were therapeutic benefits, muscular relaxation, health promotion, general relaxation, and education. Session/treatment goals receiving much lower importance ratings were normalization of cranial-sacral rhythm and neuromuscular re-education.

Session/Treatment Goals	Mean	S.D.
Education	3.27	.81
Therapeutic Benefits	3.56	.62
Bodily Alignment	2.83	.91
Emotional Release	2.51	.99
Body/Mind Integration	2.88	.98
Integrated Movement	2.48	1.00
General Relaxation	3.35	.75
Muscular Relaxation	3.44	.70
Energetic Balance	2.58	1.06
Body Awareness	3.19	.81
Normalization of Cranial-Sacral Rhythm	1.73	1.24
Neuromuscular Re-education	2.31	1.21
Symptom Relief	3.09	.85
Health Promotion	3.39	.74

Primary Massage Therapy/Bodywork discipline. Most respondents reported either Traditional European, Eclectic or Contemporary Western as their primary Massage Therapy/Bodywork discipline as shown in the table below.

Massage Therapy/Bodywork Discipline	Number	Percent
Traditional European	780	30.3
Contemporary Western	597	23.2
Structural/Functional/Movement	293	11.4
Integration		
Oriental	155	6.0
Energetic	86	3.3
Eclectic	623	24.2
No Response	40	1.6
Total	2,574	100

Secondary Massage Therapy/Bodywork discipline. Eclectic and Contemporary Western were reported by one-half of the respondents as their secondary Massage Therapy/Bodywork discipline.

Massage Therapy/Bodywork Discipline	Number	Percent
Traditional European	310	12.0
Contemporary Western	589	22.9
Structural/Functional/Movement	274	10.6
Integration		
Oriental	281	10.9
Energetic	296	11.5
Eclectic	693	26.9
No Response	131	5.1
Total	2,574	100

Client/patient sessions a week. Slightly over 75 percent of the respondents reported that on the average they conduct less than 20 sessions a week.

Client/Patient Sessions a Week	Number	Percent
Less than 10 Sessions	946	36.8
11 - 20 Sessions	1,026	39.9
21 - 30 Sessions	389	15.1
31 - 40 Sessions	105	4.1
41 - 50 Sessions	36	1.4
More than 50 Sessions	32	1.2
No Response	40	1.5
Total	2,674	100

Average session time. The majority of the respondents reported 60 minutes as the length of time of their average session as shown in the table below.

Average Session Time	Number	Percent
15 Minutes	31	1.2
30 Minutes	167	6.5
60 Minutes	1,686	65.5
More than 60 Minutes	649	25.2
No Response	41	1.6
Total	2,574	100

C. Analysis of Importance Ratings of Professional Responsibilities

In Part I of the inventory, respondents rated the importance of competence in each of the 73 professional responsibilities for entry-level massage therapists/bodyworkers. The Job Analysis Advisory Committee attempted to be comprehensive in listing the important professional responsibilities, and these efforts

produced a broad range of activities for massage therapists/bodyworkers.

Mean and variation in importance ratings of responsibilities. The professional responsibilities are listed in the table below in descending order of mean rated importance. They are listed in the order in which they appeared in the original questionnaire in Appendix I. The text of each question has been summarized. For each responsibility, the mean of average importance rating and the standard deviation are shown. The standard deviation represents the amount of variation in the respondents judgment. The scale of importance ranged from "0" (not performed by an entry-level practitioner) through "4" (extremely important). The number responding to the statements varied from 2,465 to 2,574.

RANK ORDER OF MEAN IMPORTANCE RATINGS OF RESPONSIBILITIES

Question No.	Responsibilities Question Summary	Importance Mean	S.D.
65.	Provides a safe, clean, comfortable environment..	3.88	.35
67.	Checks stability of table setup	3.84	.51
68.	Utilizes appropriate hygienic disposal.....	3.81	.50
73.	Abides by professional code of ethics.....	3.81	.47
66.	Maintains equipment, materials, and supplies.....	3.73	.63
51.	Answers clients'/patients' questions.....	3.69	.57
55.	Elicits feedback during session/treatment.....	3.62	.64
53.	Uses draping, pillows, bolsters for positioning..	3.59	.71
69.	Maintains appropriate apparel/attire.....	3.58	.68
26.	Determines indications and contraindications.....	3.54	.85
54.	Provides direction and support while positioning.	3.50	.71
56.	Elicits feedback following session/treatment.....	3.43	.78
50.	Provides orientation to session/treatment.....	3.41	.79
1.	Gliding strokes (effleurage).....	3.41	.94
2.	Kneading (petrissage).....	3.39	.93
70.	Promotes healthy lifestyle.....	3.37	.76
24.	Conducts interview with client/patient.....	3.35	.87
71.	Maintains current knowledge of techniques.....	3.29	.82
27.	Determines need for referral.....	3.28	.98
58.	Discusses practice policies with the client.....	3.28	.82
47.	Assesses client during actual session.....	3.24	.90
23.	Reviews client/patient completed health form....	3.22	1.10
46.	Determines most appropriate purpose of session...	3.16	.94
6.	Direct pressure.....	3.14	1.00
45.	Uses assessment information to plan	3.08	.97
3.	Deep friction.....	3.02	1.13
28.	Assesses by palpation evaluation.....	2.95	1.16
13.	Joint mobilization.....	2.91	1.11
61.	Provides referral to another healthcare provider.	2.91	1.12
63.	Reviews outcomes in relationship to session goals	2.91	1.00
62.	Updates history on ongoing basis.....	2.89	1.03
8.	Superficial warming techniques.....	2.86	1.06
57.	Keeps written chart notes on every client visit..	2.86	1.12
49.	Discusses assessment findings/options with client	2.79	1.09
52.	Assists client in getting on and off table.....	2.78	1.10
29.	Assesses by range of motion assessment.....	2.76	1.11
37.	Assesses potential stressors.....	2.74	1.08
38.	Assesses posture.....	2.73	1.10
64.	Interacts with primary and secondary providers...	2.73	1.13
32.	Assesses skin appearance.....	2.70	1.06
5.	Percussion (tapotement).....	2.60	1.10
25.	Checks references for possible medication effects	2.57	1.34
30.	Assesses by flexibility evaluation.....	2.56	1.16

Question No.	Responsibilities Question Summary	Importance Mean	Importance S.D.
44.	Assesses ability to perform daily living tasks...	2.56	1.22
7.	Compression (pumping).....	2.55	1.14
4.	Vibration.....	2.53	1.10
48.	Formulates treatment plan/session strategy.....	2.46	1.17
72.	Participates in local/state/national organization	2.46	1.03
34.	Assesses structural balance.....	2.35	1.23
43.	Assesses primary cause of stress.....	2.33	1.27
9.	Jostling, shaking, rocking or oscillating.....	2.32	1.11
36.	Assesses movement patterns.....	2.26	1.23
40.	Assesses psychological and emotional state.....	2.21	1.32
33.	Assesses functional balance.....	2.20	1.24
14.	Teaches and/or recommends exercises.....	2.16	1.28
35.	Assesses muscular strength.....	2.13	1.15
59.	Provides written reports to healthcare providers.	2.13	1.32
38.	Assesses vital signs.....	2.12	1.41
10.	Connective tissue/myofascial release.....	1.93	1.41
11.	Release by position.....	1.88	1.27
60.	Writes reports for insurance companies.....	1.87	1.42
12.	Skin rolling.....	1.80	1.11
21.	Provides resources for lifestyle changes.....	1.78	1.29
16.	Performs energy balancing techniques.....	1.68	1.26
17.	Applies hydrotherapy procedures and techniques...	1.68	1.33
15.	Performs posture/movement integration techniques.	1.67	1.34
31.	Assesses energy patterns.....	1.57	1.26
18.	Applies adjunct modalities.....	1.53	1.13
22.	Performs techniques for neuromuscular facilitation	1.41	1.37
19.	Uses equipment and/or apparatus.....	1.30	1.13
41.	Assesses condition of reflexive parts of body....	1.19	1.24
20.	Provides nutrition education.....	1.12	1.23
42.	Assesses by kinesiological-type muscle testing...	1.08	1.16

Classifying the responsibilities by their mean level of importance, the following table displays the distribution of the judgments:

Level of Judged Importance	Number of Responsibilities	Percent
Extremely Important (3.5 +)	11	15.1
Very Important (2.5 to 3.4)	37	50.7
Moderately Important (1.5 to 2.4)	20	27.4
Not Performed/Of Little Importance (0 to 1.4)	5	6.8
Total	73	100

The majority of the responsibilities were judged to be very important or extremely important. Additionally, 20 responsibilities fell in the moderately important range. Only five fell in the not performed/of little importance range. The responsibilities judged most important were primarily in the areas of providing a safe, comfortable, and clean session/treatment environment, professional development/ethics, and client/patient preparation. Responsibilities receiving lower importance ratings generally dealt with session/treatment adjunct techniques and certain specific types of assessment procedures.

Agreement on importance ratings among subgroups. How well do different segments of the respondent group agree on the relative importance of responsibilities? The demographic questions included in the survey questionnaire provide us with a way to find out. We compared the importance ratings of men and women, of majority and minority ethnic groups, different age groups, practitioners in different geographic regions and locations, level of education, years practicing Massage Therapy/Bodywork, type and hours of training, practitioners in different practice settings, disciplines and organizations, and licensed versus non-licensed massage therapists/bodyworkers.

Using these different ways of dividing the respondent group, it is possible to demonstrate the extent of agreement observed. The means for the various segments of the respondent group are listed in Appendix J. The agreement index was the correlation, across the survey questions, between the mean ratings of one subgroup and another.

The correlation can range from +1.00 to -1.00, with +1.00 indicating perfect agreement. The correlations showing extent of agreement on the importance of responsibilities were as follows:

<u>Gender</u> (men vs. women):	+ .99
<u>White vs. Other Ethnic Groups</u> combined:	+ .99
<u>Age</u> (under 34 vs. 35-44 vs. 45-54 vs. 55 or over):	+ .98 to + .99
<u>Geographic Region</u> (Pacific vs. Midwest vs. Great Lakes vs. Southeast vs. Northeast):	+ .98 to + .99
<u>Location</u> (urban vs. suburban vs. rural):	+ .99 to + .99
<u>Level of Education</u> (high school graduate or less vs. some college vs. technical/vocational certificate vs. 2-year college degree vs. 4-year college degree vs. advance degree):	+ .96 to + .99
<u>Years Practicing Massage Therapy/ Bodywork</u> (less than a year vs. 1-2 years vs. 3-5 years vs. 6-10 years vs. 11-15 years vs. 16 or more years):	+ .97 to + .99
<u>Type of Massage Therapy/Bodywork Training</u> (self-taught vs. work- shops, seminars vs. school training program vs. apprenticeship):	+ .98 to + .99
<u>Hours of Massage Therapy/Bodywork Training</u> (less than 200 hours vs. 201-300 hours vs. 301-500 hours vs. 501-1000 hours vs. more than 1000 hours):	+ .98 to + .99
<u>Practice Setting</u> (private practice clinic/office vs. private practice in home vs. others):	+ .99 to + .99
<u>Massage Therapy/Bodywork Primary Discipline</u> (traditional European vs. contemporary western vs. structural integration/functional integration/movement integration vs. Oriental vs. energetic vs. eclectic):	+ .80 to + .99

Licensed vs. Non-Licensed (state): +.99

Organizational Membership (AMTA
vs. AOBTA vs. APTA vs. IMF vs.
Rolf Institute vs. other): +.73 to +.99

The high correlations indicate that members of these subgroups agree quite strongly on the relative importance of the various professional responsibilities.

D. Analysis of Importance Ratings of Knowledge Areas

The Advisory Committee prepared a comprehensive list of 91 knowledge areas, organized into ten categories, that were believed to be important for competent performance of the professional responsibilities of massage therapists /bodyworkers. A committee preparing an examination for certification in the profession should consider those knowledge areas that were judged to be at least of moderate importance by professionals in the field.

Mean and variation in importance ratings of knowledge areas. The 91 knowledge areas of Part II of the survey questionnaire are listed in the table below. The knowledge areas are listed in order from most important to least important, based on the judgments of the respondents in our sample. The knowledge areas are listed in the order in which they appeared in the survey questionnaire in Appendix K. The mean importance rating and the standard deviation are shown for each knowledge area. The number responding to the questions varied from 2,434 to 2,574.

RANK ORDER OF MEAN IMPORTANCE RATINGS OF KNOWLEDGE AREAS

Question No.	Knowledge Areas Question Summary	Importance Mean	S.D.
109.	Hygiene and sanitation in Massage Therapy.....	3.71	.59
120.	Endangerment sites (jugular vein, eyes, etc.)..	3.67	.65
103.	Contraindications.....	3.60	.74
162.	Professional standards and ethical guidelines.	3.58	.66
76.	Musculo-skeletal system.....	3.56	.67
163.	State and local laws, licensing and regulation	3.55	.74
85.	Relationship between anatomy/physio. and MT/BW	3.51	.72
74.	Structure of the human body.....	3.49	.68
116.	Basic theory of Massage/Bodywork.....	3.48	.79
142.	Client positioning, support, draping, turning..	3.42	.85
75.	Function and location of the major organs.....	3.34	.72
164.	Basic business practices and standards.....	3.32	.76
127.	Injuries.....	3.29	.87
118.	Use of MT/BW to effect soft tissue, energy,...	3.27	.86
133.	Muscle/fascia conditions.....	3.19	.89
88.	Origins, insertions, and actions of muscles...	3.18	.93
104.	Signs and symptoms of disease.....	3.14	.91
159.	CPR/Standard First Aid.....	3.14	1.03
119.	Physiological rationale of Massage/Bodywork...	3.12	.89
132.	Skin conditions.....	3.07	.93
110.	Interview techniques.....	3.05	.84
131.	Skeletal dysfunction.....	3.05	.94
137.	Circulatory conditions.....	3.05	.94
79.	Lymphatic system.....	3.03	.85
77.	Nervous system.....	3.01	.83
80.	Skin/Integumentary system.....	3.01	.85
114.	Observation techniques.....	2.99	.94
78.	Cardiovascular system.....	2.97	.82
128.	Joint disorders.....	2.97	1.04
134.	Emotional states.....	2.94	.92
117.	Technical descriptions of Massage/Bodywork....	2.90	.99
129.	Neurological disorders.....	2.90	1.03
87.	Efficient and safe movement patterns.....	2.88	.98
105.	Healing mechanisms of the body.....	2.83	.99
111.	Range of motion.....	2.83	.90
81.	Respiratory system.....	2.80	.85
82.	Digestive system.....	2.75	.85
113.	Palpation.....	2.72	1.10
160.	Scope of practice of other MT/BW disciplines..	2.64	1.00
83.	Endocrine system.....	2.60	.94
156.	Exercise methods.....	2.58	1.00
136.	Respiratory conditions.....	2.57	1.00
130.	Gastrointestinal disorders.....	2.55	1.09

Question No.	Knowledge Areas Question Summary	Importance	
		Mean	S.D.
106.	Physiological changes of body during disease..	2.54	1.03
124.	Joint mobilization.....	2.48	1.07
161.	Scope of practice of healthcare disciplines...	2.44	1.02
84.	Urogenital system.....	2.43	.98
157.	Stress management/relaxation techniques.....	2.43	1.10
108.	Medical terminology.....	2.42	1.00
139.	Hydrotherapy indications and contraindications	2.38	1.28
86.	Analysis of human movement.....	2.36	1.08
107.	Energetic changes of the body during disease..	2.31	1.10
125.	Enhancing body movement function.....	2.28	1.11
135.	Somatic holding patterns.....	2.16	1.19
96.	Oriental/Energetic manipulations/techniques...	2.14	1.29
138.	Theories of hydrotherapy.....	2.10	1.16
102.	Relationship of energetic and other states....	2.08	1.23
140.	Hydrotherapy techniques.....	2.06	1.20
122.	Energetic rationale of Massage/Bodywork.....	1.91	1.14
123.	Integration of structure and gravity.....	1.89	1.17
92.	Points (location, indication, function).....	1.84	1.22
158.	Body-oriented emotional facilitation.....	1.84	1.21
97.	Energetic anatomy and physiology.....	1.82	1.21
95.	Causes of disease (internal, external,etc.)...	1.79	1.16
100.	Energy patterns.....	1.75	1.18
155.	Nutrition education.....	1.75	1.19
121.	How to work with energy fields off the body...	1.69	1.16
94.	Organ theory (complex of associated functions)	1.64	1.14
112.	Pulse diagnosis.....	1.64	1.17
89.	Traditional Oriental medical model.....	1.63	1.14
90.	Fundamental principles (Yin-Yang).....	1.63	1.16
91.	Pathway/channel system.....	1.63	1.17
93.	Essential substances (Qi, blood, fluids).....	1.63	1.15
143.	Energy techniques.....	1.58	1.16
99.	Energetic reflex relationships.....	1.57	1.13
126.	Energy bipolar contacts on body.....	1.47	1.11
148.	Music therapy.....	1.47	1.17
101.	Element correspondences.....	1.44	1.13
98.	Energy geometries.....	1.40	1.09
152.	Electrical or mechanical massage/bodywork tool	1.25	1.06
153.	Compressive devices for points.....	1.10	1.05
115.	Measurement techniques.....	1.08	1.03
151.	Aromatherapy.....	1.05	1.00
154.	Light therapy.....	.91	.99
144.	Color therapy.....	.89	.90
141.	Colonics.....	.87	1.03
150.	Flower essences.....	.85	.92

Question No.	Knowledge Areas Question Summary	Importance	
		Mean	S.D.
148.	Magnetism.....	.79	.91
145.	Crystal therapy.....	.75	.85
146.	Moxibustion.....	.75	.91
147.	Use of Chinese cups.....	.65	.84

The number of knowledge areas receiving importance ratings at each of several levels is shown below:

Level of Judged Importance	Number of Knowledge Areas	Percent
Extremely Important (3.5+)	9	9.9
Very Important (2.5 to 3.4)	40	43.9
Moderately Important (1.5 to 2.4)	26	28.6
Of Little Importance (0 to 1.4)	16	17.6
Total	91	100

The table shows that nearly all of the knowledge areas were considered to be at least moderately important by our respondents, and that over 50 percent of the areas were rated as very important or above. Only 16 knowledge areas that fell in the "of little importance" range.

The respondents indicated that it was most important for entry-level massage therapists/bodyworkers to have knowledge of clinical pathology, Massage/Bodywork theory and practice, business practices and professionalism, and human anatomy and physiology. Knowledge areas ranking near the bottom of the list dealt with adjunct techniques and methods and Oriental/Energetic anatomy and physiology.

Agreement on importance ratings among subgroups. As with the professional responsibilities, various segments of the respondent group were compared using between group correlations to assess the extent of relative agreement on the knowledge areas that appeared on the survey instrument. The means for the subgroups are listed in Appendix L. The correlations were as follow:

<u>Gender</u> (men vs. women):	+ .99
<u>White vs. Other Ethnic Groups</u> combined:	+ .99
<u>Age</u> (under 34 vs. 35-44 vs. 45-54 vs. 55 or over):	+ .98 to + .99
<u>Geographic Region</u> (Pacific vs. Midwest vs. Great Lakes vs. Southeast vs. Northeast):	+ .98 to + .99

Location (urban vs. suburban vs. rural): +.99 to +.99

Level of Education (high school graduate or less vs. some college vs. technical/vocational certificate vs. 2-year college degree vs. 4-year college degree vs. advanced degree): +.98 to +.99

Years Practicing Massage Therapy/Bodywork (less than a year vs. 1-2 years vs. 3-5 years vs. 6-10 years vs. 11-15 years vs. 16 or more years): +.98 to +.99

Type of Massage Therapy/Bodywork Training (self-taught vs. workshops, seminars vs. school training program vs. apprenticeship): +.98 to +.99

Hours of Massage Therapy/Bodywork Training (less than 200 hours vs. 201-300 hours vs. 301-500 hours vs. 501-1,000 hours vs. more than 1,000 hours): +.98 to +.99

Practice Setting (private practice clinic/office vs. private practice in home vs. other): +.99 to +.99

Massage Therapy/Bodywork Primary Discipline (traditional European vs. contemporary western vs. structural integration/functional integration/movement integration vs. Oriental vs. energetic vs. eclectic): +.72 to +.99

Licensed vs. Non-Licensed (state): +.99

Organizational Membership (AMTA vs. AOBTA vs. APTA vs. IMF vs. Rolf Institute vs. other): +.64 to +.99

Here again we see strong agreement among the various subgroups of the profession as to the importance of knowledge required for competent performance regardless of gender, ethnic group, age, geographic region, location, level of education, years practicing Massage Therpay/Bodywork, type and hours of training, practice setting, discipline, organizational membership or licensed versus non-licensed.

E. Suggested Examination Content

Following Section II of the survey instrument, respondents were asked to suggest the percent of examination coverage that should be allotted to each of the ten general categories of knowledge areas. The means of these examination coverage suggestions are shown in the table below.

Knowledge Category	Suggested Percent of Examination	Standard Deviation
Human Anatomy and Physiology	24.2	13.2
Kinesiology	7.6	6.8
Oriental/Energetic Anatomy and Physiology	4.7	6.3
Clinical Pathology	6.8	5.2
Assessment Procedures	8.1	5.6
Massage/Bodywork Theory and Practice	17.9	11.9
Energetic, Structural and Functional Bodywork Theory and Practice	7.1	7.1
Recognition of Various Conditions	8.0	5.2
Adjunct Techniques and Method	5.1	4.5
Business Practices and Professionalism	7.7	5.7
100		

Here, as in the importance ratings of specific knowledge areas, knowledge related to human anatomy and physiology and Massage Therapy/Bodywork theory and practice received more emphasis, with knowledge of Oriental/Energetic anatomy and physiology and adjunct techniques and methods receiving less emphasis.

The percentages suggested for the various general knowledge categories can serve as an initial guide in the construction of certification examination specifications. A committee of subject-matter experts can select the specific knowledge areas in each category with the highest importance ratings and then construct test questions to assess those areas in numbers roughly proportional to the percentages shown above.

CONCLUSIONS AND RECOMMENDATIONS

A. Professional Responsibilities

Massage Therapy and Bodywork practitioners were asked to judge each of a large set of professional responsibilities in terms of their importance for an entry-level massage therapist/bodyworker. Of the 73 professional responsibilities listed, 65.8 percent were rated as being very important or higher. Only 5 of the tasks were judged to be unimportant. Agreement on the relative importance of the responsibilities among various segments of the respondent group was very high. We can conclude that the 48 responsibilities judged as very important or higher represent activities that can be used in providing job-related contexts for preparing questions for a certification examination.

B. Professional Knowledge

The primary purpose of the job analysis reported herein was to delineate a body of professional knowledge that is judged by persons who are expert in the field to be an important prerequisite to competent performance on the job. These results provide a sound basis for identifying the content that is appropriate for inclusion in a certification examination.

Of the 91 knowledge areas included in the job analysis, 75 were judged to be of at least moderate importance. Over 50 percent were judged to be from very, to extremely important, in carrying out the responsibilities of the profession. Agreement on the relative importance of the knowledge areas was quite high among the several subgroups in the sample.

The results of the national job analysis study provided evidence for a core body of knowledge required for entry-level massage therapists/bodyworkers. However, the variation in data from the different disciplines (e.g., oriental, energetic) represented in the sample does not rule out the need for specialty examinations.

C. Recommendations

A select Advisory Committee consisting of prominent members of the profession developed a listing of professional responsibilities and professional knowledge which they believed represented what massage therapists/bodyworkers do on the job and what they need to know to perform their responsibilities. The products of the Advisory Committee were sent to a large

national sample of massage therapists/bodyworkers. The survey results confirmed and supported the work of the Advisory Committee.

The delineation of the important dimensions and specific areas of the knowledge domain by a select committee of Massage Therapy/Bodywork professionals, verified by the judgments of a nationwide sample of Massage Therapy/Bodywork practitioners, provides a pool of job-related content to construct a certification examination. Initial guidance regarding the proportion of each of the general categories of the knowledge domain to include in the examination can be drawn from the suggested percentages of content coverage cited earlier in this report. Knowledge areas with the highest importance ratings in those categories would then form the basis of examination questions.

Knowledge areas selected for inclusion in the examination should be linked to job dimensions and tasks for which they are judged relevant by a Test Development Committee. The questions would be written, insofar as possible, in the context of professional responsibilities for which they are relevant.

A professional certification examination supported by the information collected in the job analysis will provide a job-related and content-valid standard. The job analysis has provided a core body of important tasks and knowledge areas on which there is substantial professional agreement. The establishment of such an examination will serve to advance the profession and will contribute to maintaining high standards of protection and service to clients/patients.